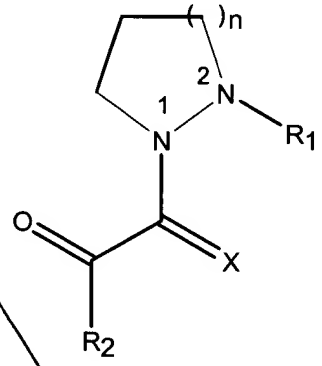
In the Claims:

Attached is a marked-up version showing changes made in the claims.

Please cancel claims 41-43 without prejudice or disclaimer.

In accordance with 37 CFR § 1.121, please substitute the current version of claims 1, 4, 7, 10-11, and 14 with their version below.

1. (Amended) A compound of formula I

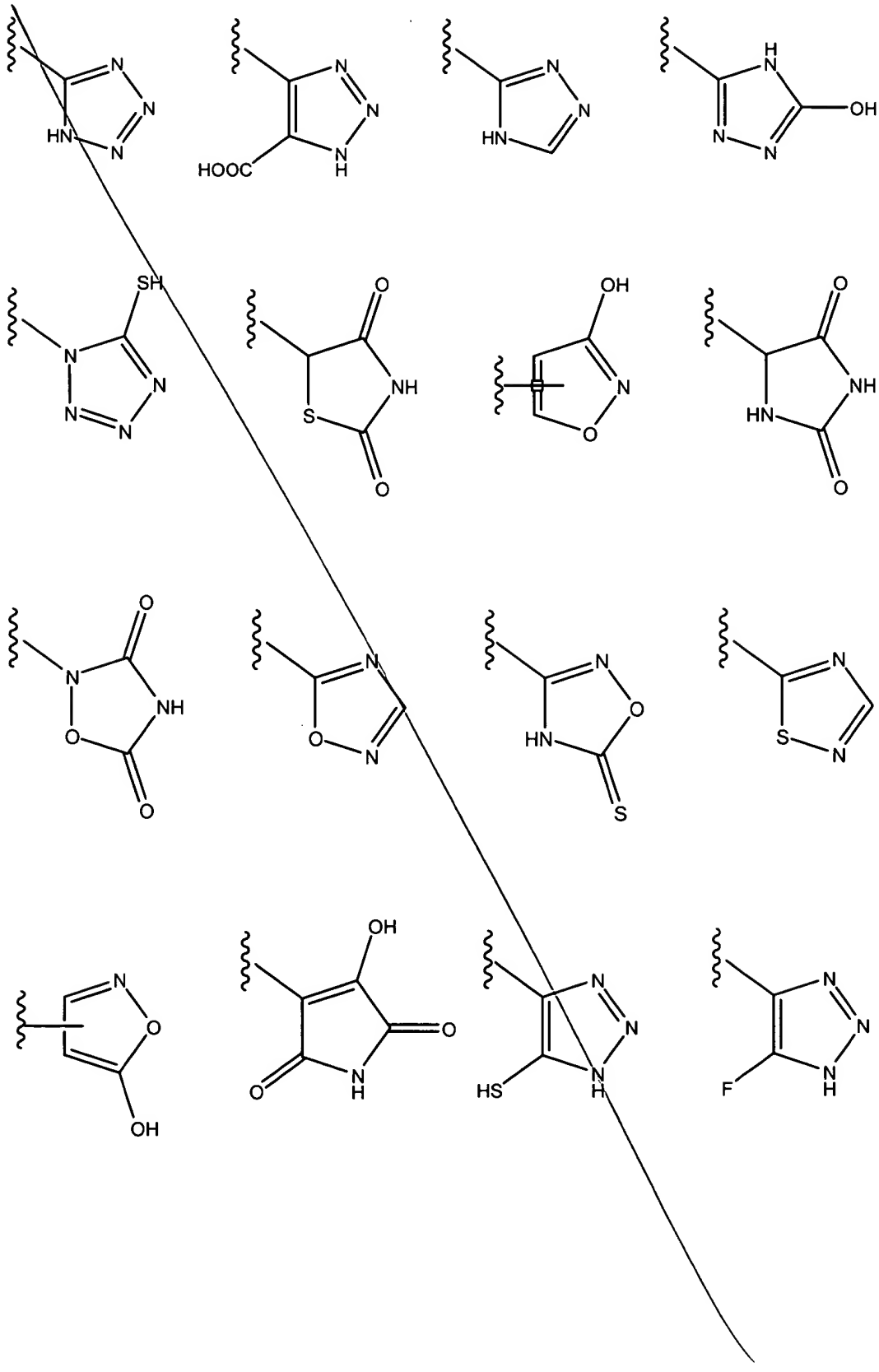


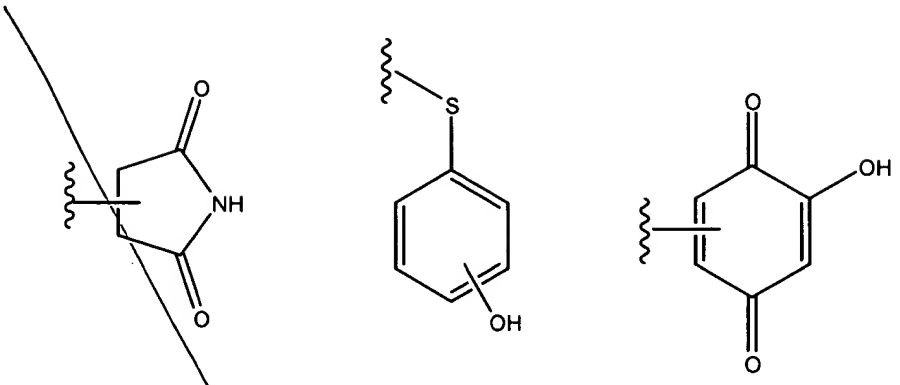
I

or a pharmaceutically acceptable salt, ester or solvate thereof, wherein:

n = 1-3;

R_1 is selected from the group consisting of $-CR_3$, $-COOR_3$, $-COR_3$, -COOH, $-SO_3H$, $-SO_2HNR_3$, $-PO_2(R_3)_2$, -CN, $-PO_3(R_3)_2$, $-OR_3$, $-SR_3$, $-NHCOR_3$, $-N(R_3)_2$, $-CON(R_3)_2$, $-CONH(O)R_3$, $-CONHNHSO_2R_3$, $-COHNSO_2R_3$, $-CONR_3CN$,





wherein said R_1 group is either unsubstituted or additionally substituted with R_3;

R_2 is selected from the group consisting of hydrogen, C_1-C_9 straight or branched chain alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, aryl, heteroaryl, carbocycle, or heterocycle, wherein said alkyl, alkenyl, alkynyl, aryl, heteroaryl, carbocycle, or heterocycle is unsubstituted or substituted with one or more substituents selected from R_3;

R_3 is selected from the group consisting of hydrogen, C_1-C_9 alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, C_1-C_9 alkoxy, C_2-C_9 alkenyloxy, aryloxy, phenoxy, benzyloxy, hydroxy, carboxy, C_1-C_9 thioalkyl, C_2-C_9 thioalkenyl, C_1-C_9 alkylamino, C_2-C_9 alkenylamino, cyano, nitro, imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocycle, and heterocycle,

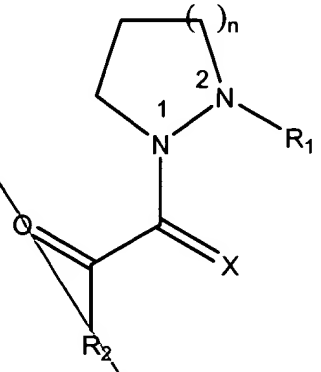
wherein said alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, aryloxy, thioalkyl, thioalkenyl, alkylamino, alkenylamino, aryl, heteroaryl, carbocycle, or heterocycle group is optionally substituted with a hydroxy, carboxy, carbonyl, cyano, nitro,

imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocyle, or heterocycle group; and

X is O or S.

4. (Amended) A pharmaceutical composition comprising:

(i) a therapeutically effective amount of a compound of formula I:

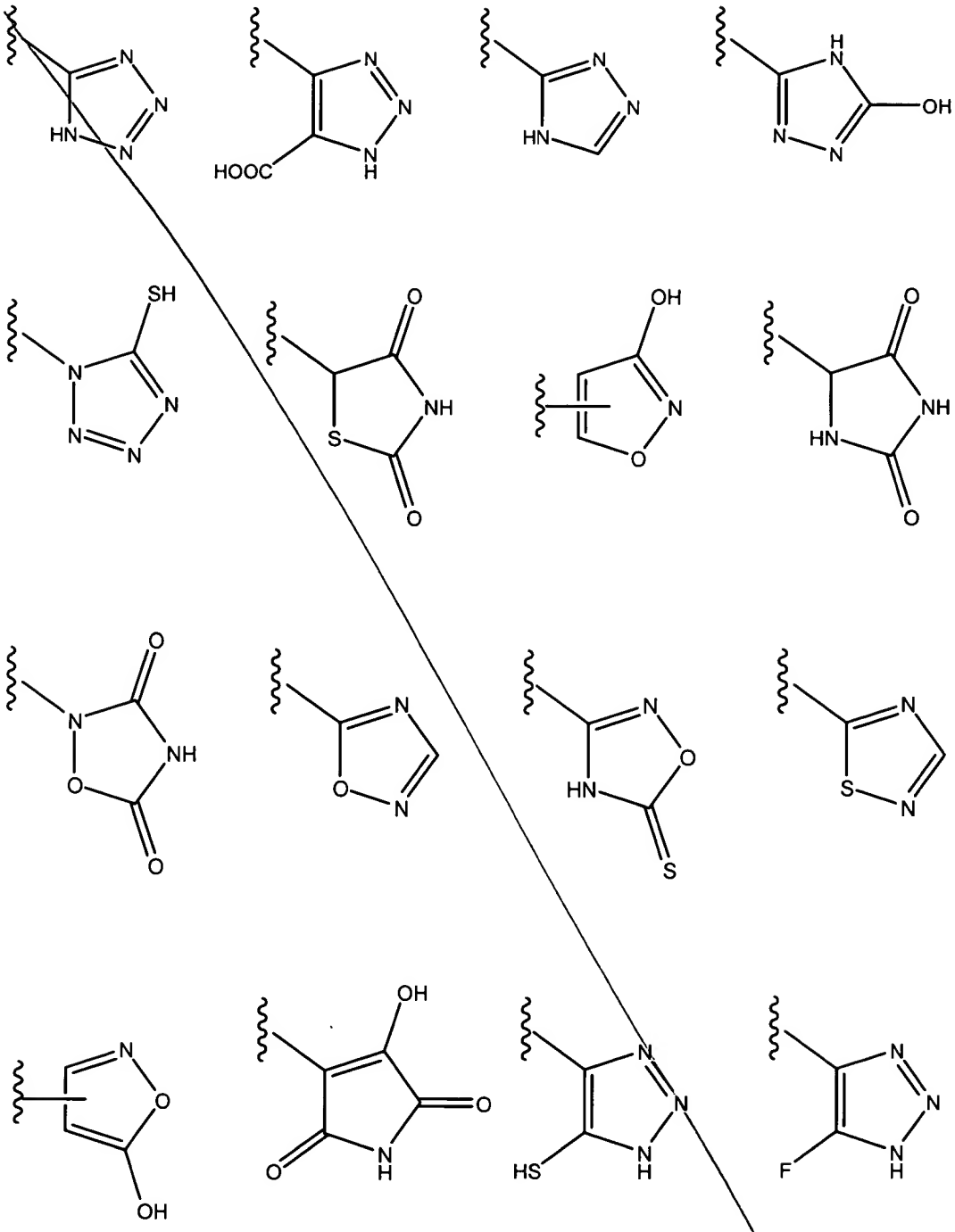


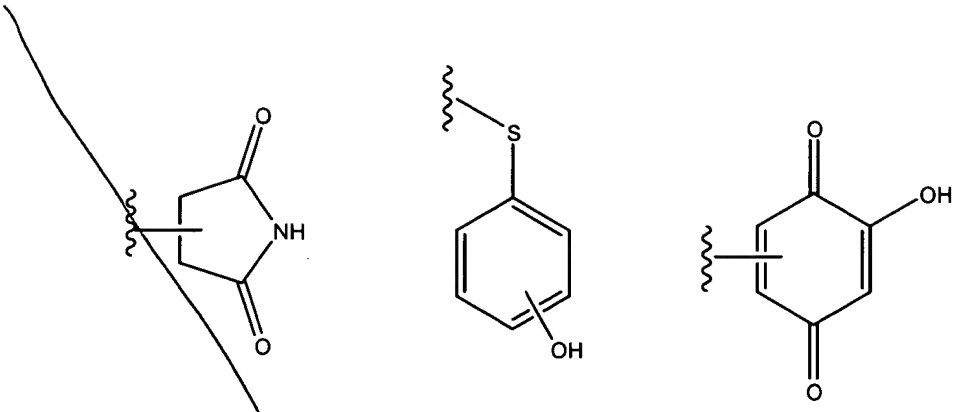
I

or a pharmaceutically acceptable salt, ester or solvate thereof, wherein:

n = 1-3;

R_1 is selected from the group consisting of $-CR_3$, $-COOR_3$, $-COR_3$, -COOH, $-SO_3H$, $-SO_2HNR_3$, $-PO_2(R_3)_2$, -CN, $-PO_3(R_3)_2$, $-OR_3$, $-SR_3$, $-NHCOR_3$, $-N(R_3)_2$, $-CON(R_3)_2$, $-CONH(O)R_3$, $-CONHNHSO_2R_3$, $-COHNSO_2R_3$, $-CONR_3CN$,





wherein said R_1 group is either unsubstituted or additionally substituted with R_3;

R_2 is selected from the group consisting of hydrogen, C_1-C_9 straight or branched chain alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, aryl, heteroaryl, carbocycle, or heterocycle, wherein said alkyl, alkenyl, alkynyl, aryl, heteroaryl, carbocycle, or heterocycle is unsubstituted or substituted with one or more substituents selected from R_3;

R_3 is selected from the group consisting of hydrogen, C_1-C_9 alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, C_1-C_9 alkoxy, C_2-C_9 alkenyloxy, aryloxy, phenoxy, benzyloxy, hydroxy, carboxy, C_1-C_9 thioalkyl, C_2-C_9 thioalkenyl, C_1-C_9 alkylamino, C_2-C_9 alkenylamino, cyano, nitro, imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocycle, and heterocycle,

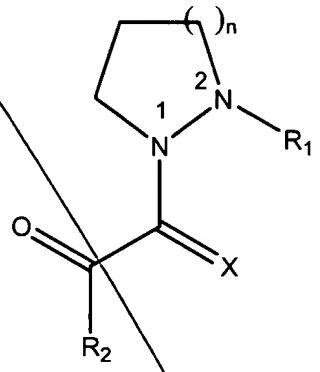
wherein said alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, aryloxy, thioalkyl, thioalkenyl, alkylamino, alkenylamino, aryl, heteroaryl, carbocycle, or heterocycle group is optionally substituted with a hydroxy, carboxy, carbonyl, cyano, nitro,

imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocyle, or heterocycle group; and

X is O or S; and

(ii) a pharmaceutically acceptable carrier.

7. (Amended) A method for affecting a neuronal activity in a mammal, comprising administering to the mammal an effective amount of a compound of formula I:

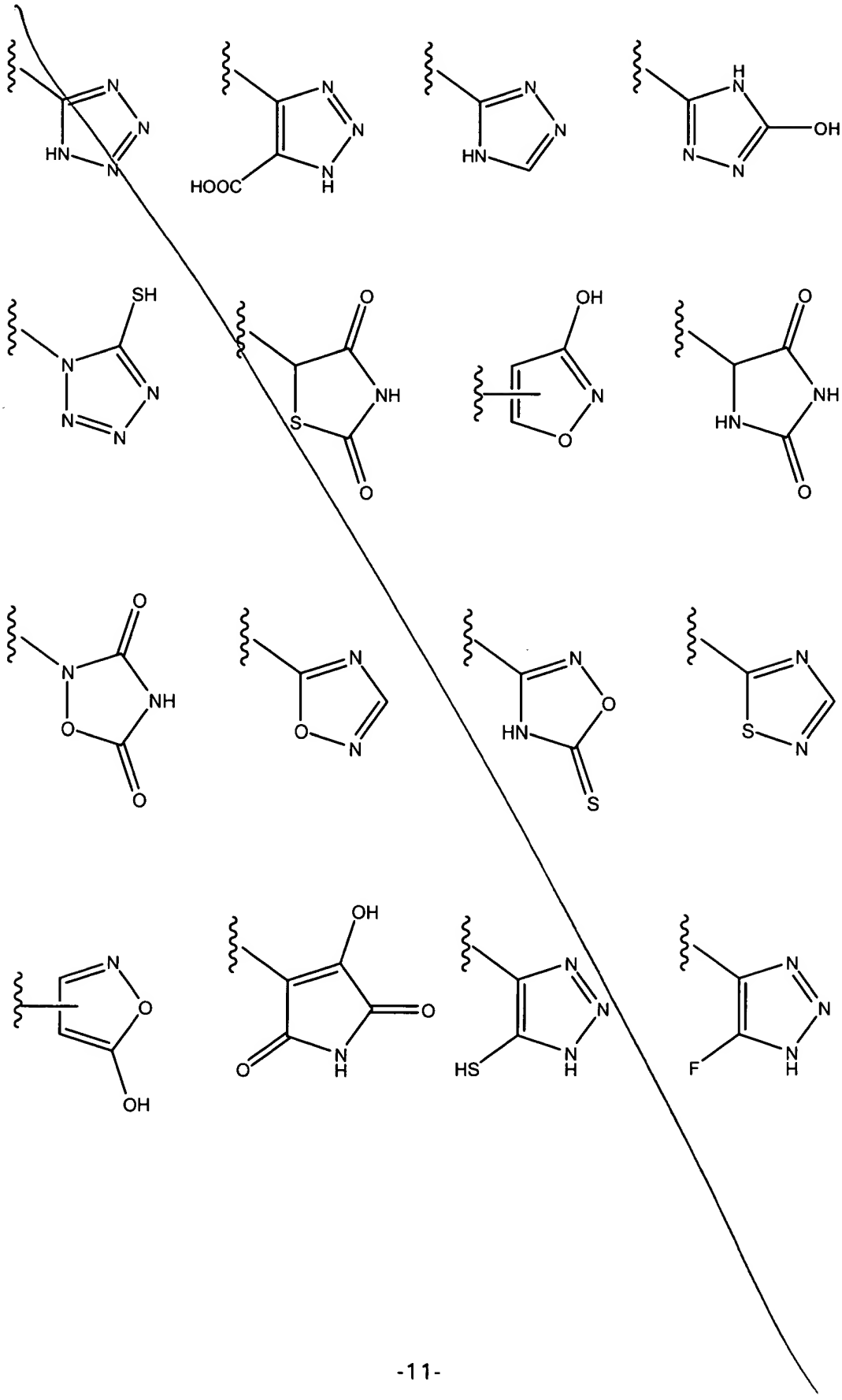


I

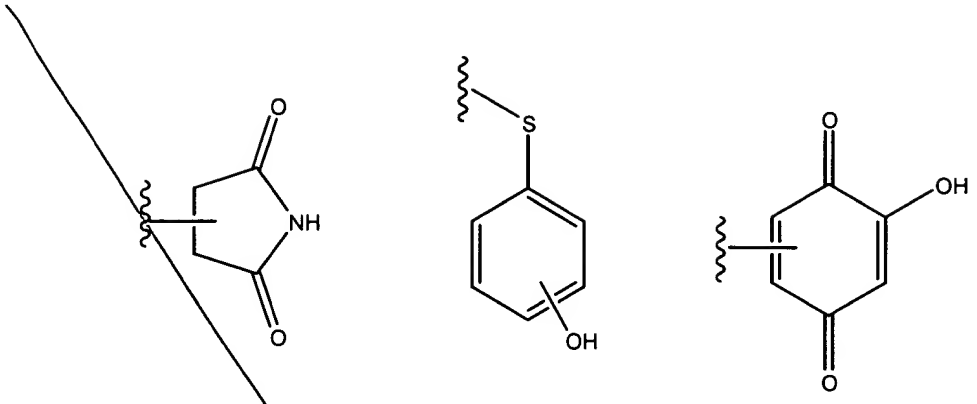
or a pharmaceutically acceptable salt, ester or solvate thereof, wherein:

n = 1-3;

R_1 is selected from the group consisting of $-CR_3$, $-COOR_3$, $-COR_3$, -COOH, $-SO_3H$, $-SO_2HNR_3$, $-PO_2(R_3)_2$, -CN, $-PO_3(R_3)_2$, $-OR_3$, $-SR_3$, $-NHCOR_3$, $-N(R_3)_2$, $-CON(R_3)_2$, $-CONH(O)R_3$, $-CONHNHSO_2R_3$, $-COHNSO_2R_3$, $-CONR_3CN$,



-11-



wherein said R_1 group is either unsubstituted or additionally substituted with R_3;

R_2 is selected from the group consisting of hydrogen, C_1-C_9 straight or branched chain alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, aryl, heteroaryl, carbocycle, or heterocycle, wherein said alkyl, alkenyl, alkynyl, aryl, heteroaryl, carbocycle, or heterocycle is unsubstituted or substituted with one or more substituents selected from R_3;

R_3 is selected from the group consisting of hydrogen, C_1-C_9 alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, C_1-C_9 alkoxy, C_2-C_9 alkenyloxy, aryloxy, phenoxy, benzyloxy, hydroxy, carboxy, C_1-C_9 thioalkyl, C_2-C_9 thioalkenyl, C_1-C_9 alkylamino, C_2-C_9 alkenylamino, cyano, nitro, imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocycle, and heterocycle,

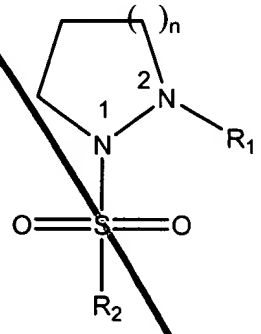
wherein said alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, aryloxy, thioalkyl, thioalkenyl, alkylamino, alkenylamino, aryl, heteroaryl, carbocycle, or heterocycle group is optionally substituted with a hydroxy, carboxy, carbonyl, cyano, nitro,

imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocyle, or heterocycle group; and

X is O or S.

10. (Amended) The method of claim 9, wherein the neurological disorder relating to neurodegeneration is selected from the group consisting of Alzheimer's disease, Parkinson's disease, Huntington's disease, and amyotrophic lateral sclerosis.

11. (Amended) A compound of formula II:



II

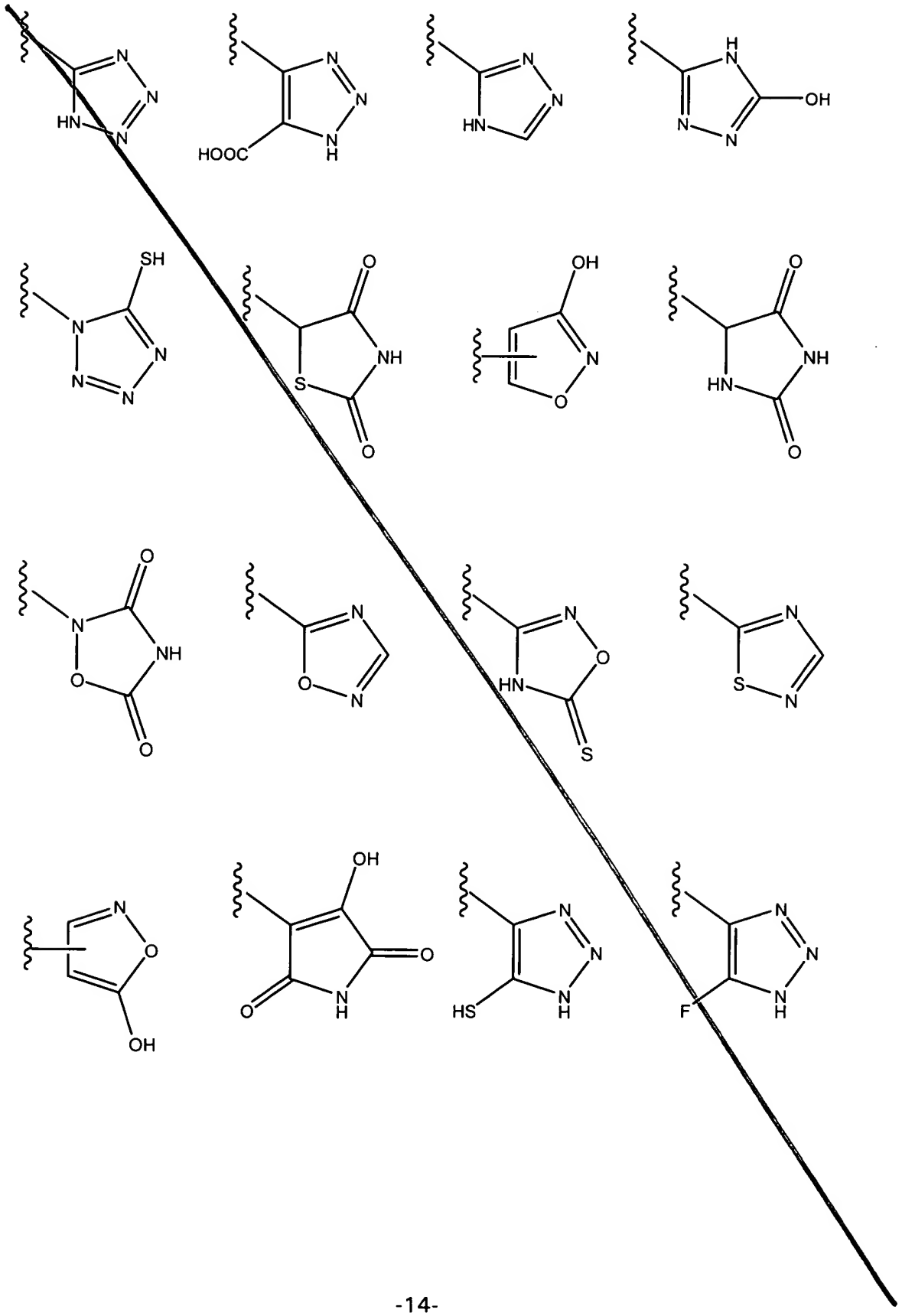
or a pharmaceutically acceptable salt, ester or solvate thereof, wherein:

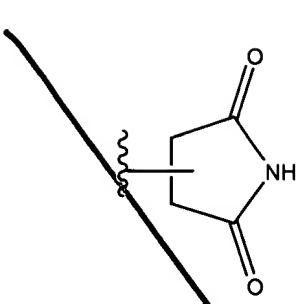
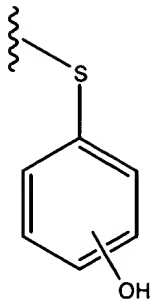
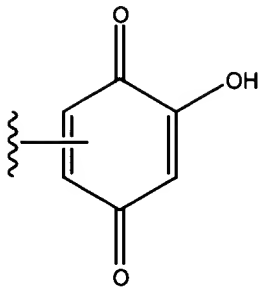
n = 1-3;

R_1 is selected from the group consisting of $-CR_3$, $-COOR_3$, $-COR_3$, -COOH, $-SO_3H$, $-SO_2HNR_3$, $-PO_2(R_3)_2$, -CN, $-PO_3(R_3)_2$, $-OR_3$, $-SR_3$, $-NHCOR_3$, $-N(R_3)_2$, $-CON(R_3)_2$, $-CONH(O)R_3$, $-CONHNHSO_2R_3$, $-COHNSO_2R_3$, $-CONR_3CN$,

B3 cont

A4



B3 cont

A4 wherein said R_1 group is either unsubstituted or additionally substituted with R_3;

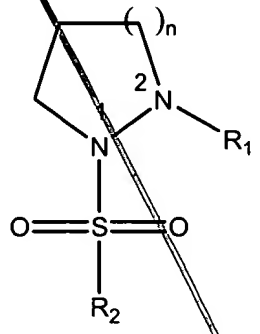
R_2 is selected from the group consisting of hydrogen, C_1-C_9 straight or branched chain alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, aryl, heteroaryl, carbocycle, or heterocycle, wherein said alkyl, alkenyl, alkynyl, aryl, heteroaryl, carbocycle, or heterocycle is unsubstituted or substituted with one or more substituents selected from R_3;

R_3 is selected from the group consisting of hydrogen, C_1-C_9 alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, C_1-C_9 alkoxy, C_2-C_9 alkenyloxy, aryloxy, phenoxy, benzyloxy, hydroxy, C_1-C_9 thioalkyl, C_2-C_9 thioalkenyl, C_1-C_9 alkylamino, C_2-C_9 alkenylamino, cyano, nitro, imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocycle, and heterocycle,

wherein said alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, aryloxy, thioalkyl, thioalkenyl, alkylamino, alkenylamino, aryl, heteroaryl, carbocycle, or heterocycle group is optionally substituted with a hydroxy, carboxy, carbonyl, cyano, nitro, imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocyle, or heterocycle group.

14. (Amended) A pharmaceutical composition comprising:

(i) a therapeutically effective amount of a compound of formula II:

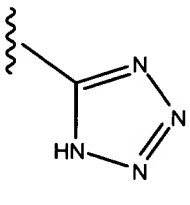


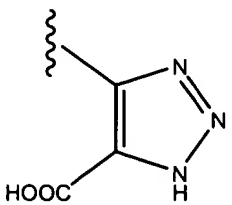
II

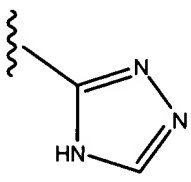
or a pharmaceutically acceptable salt, ester or solvate thereof, wherein:

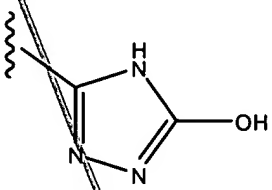
n = 1-3;

R_1 is selected from the group consisting of $-CR_3$, $-COOR_3$, $-COR_3$, -COOH, $-SO_3H$, $-SO_2HNR_3$, $-PO_2(R_3)_2$, -CN, $-PO_3(R_3)_2$, $-OR_3$, $-SR_3$, $-NHCOR_3$, $-N(R_3)_2$, $-CON(R_3)_2$, $-CONH(O)R_3$, $-CONHNHSO_2R_3$, $-COHNSO_2R_3$, $-CONR_3CN$,



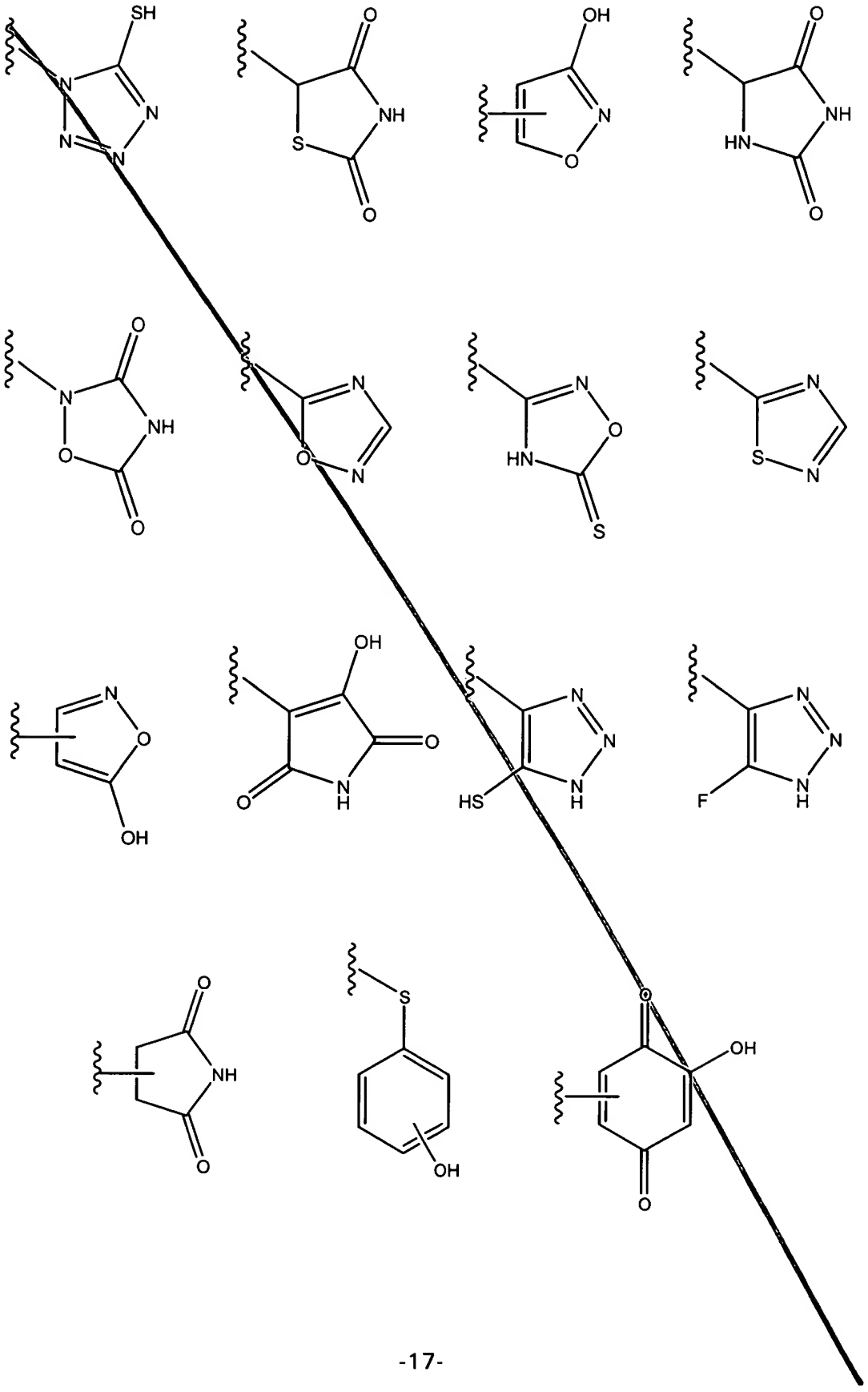






B4 cont

A5



wherein said R_1 group is either unsubstituted or additionally substituted with R_3;

R_2 is selected from the group consisting of hydrogen, C_1-C_9 straight or branched chain alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, aryl, heteroaryl, carbocycle, or heterocycle, wherein said alkyl, alkenyl, alkynyl, aryl, heteroaryl, carbocycle, or heterocycle is unsubstituted or substituted with one or more substituents selected from R_3;

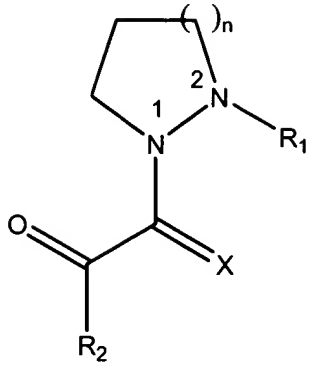
R_3 is selected from the group consisting of hydrogen, C_1-C_9 alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, C_1-C_9 alkoxy, C_2-C_9 alkenyloxy, aryloxy, phenoxy, benzyloxy, hydroxy, C_1-C_9 thioalkyl, C_2-C_9 thioalkenyl, C_1-C_9 alkylamino, C_2-C_9 alkenylamino, cyano, nitro, imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocycle, and heterocycle,

wherein said alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, aryloxy, thioalkyl, thioalkenyl, alkylamino, alkenylamino, aryl, heteroaryl, carbocycle, or heterocycle group is optionally substituted with a hydroxy, carboxy, carbonyl, cyano, nitro, imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocyle, or heterocycle group; and

(ii) a pharmaceutically acceptable carrier.

Please add the following new claims:

44. (New) A method of making a pharmaceutical composition, comprising adding together a pharmaceutically acceptable carrier and a compound of formula I



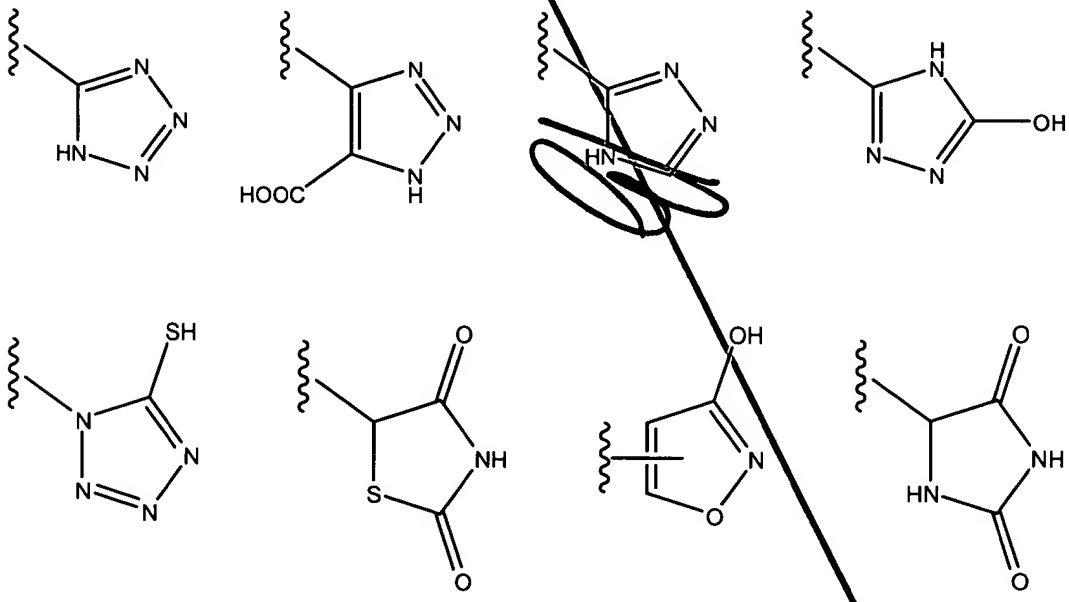
I

or a pharmaceutically acceptable salt, ester or solvate thereof, wherein:

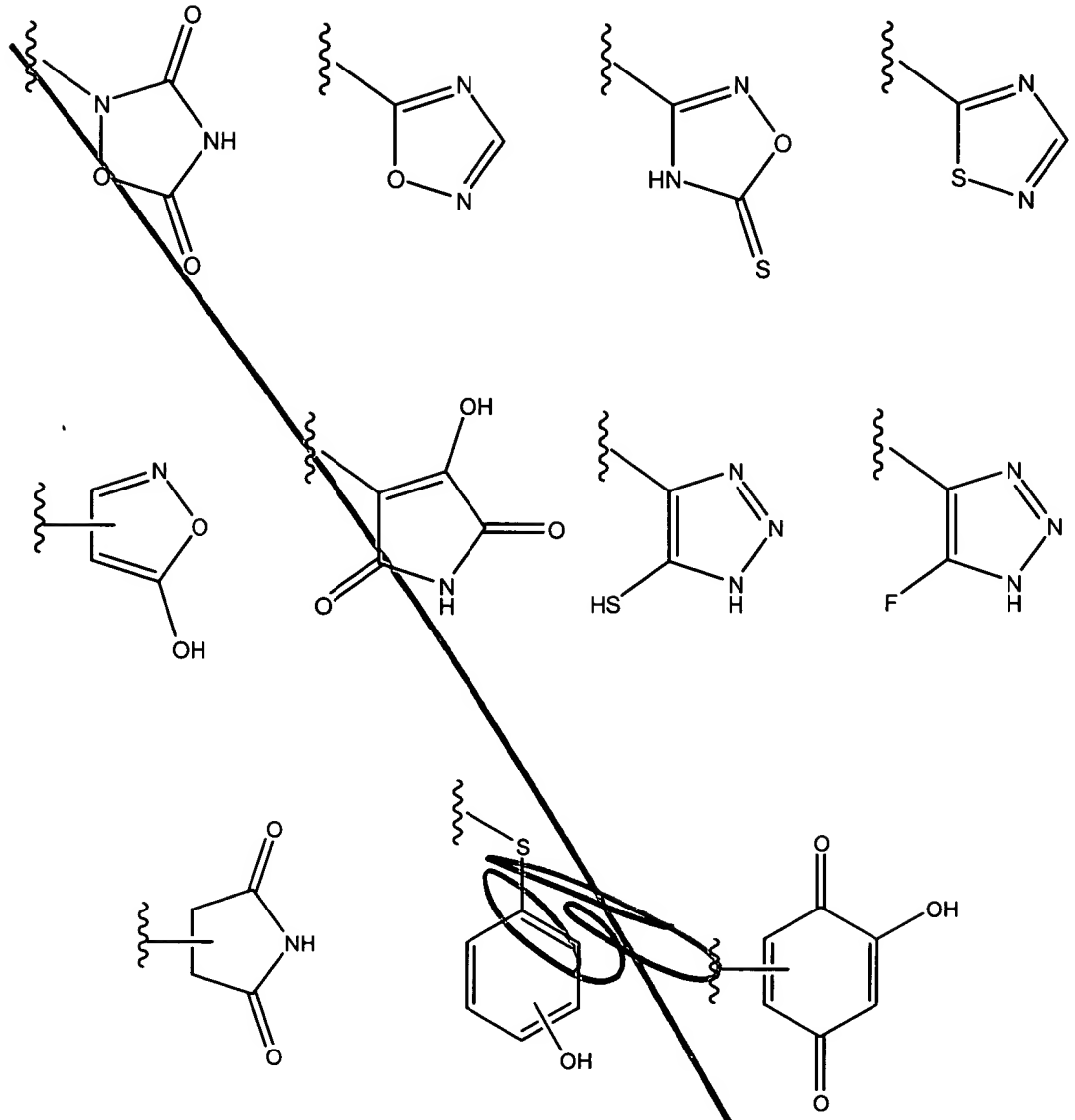
A6

n = 1-3;

R_1 is selected from the group consisting of $-CR_3$, $-COOR_3$, $-COR_3$, -COOH, $-SO_3H$, $-SO_2HNR_3$, $-PO_2(R_3)_2$, -CN, $-PO_3(R_3)_2$, $-OR_3$, $-SR_3$, $-NHCOR_3$, $-N(R_3)_2$, $-CON(R_3)_2$, $-CONH(O)R_3$, $-CONHNHSO_2R_3$, $-COHNSO_2R_3$, $-CONR_3CN$,



A4



wherein said R_1 group is either unsubstituted or additionally substituted with R_3;

R_2 is selected from the group consisting of hydrogen, C_1-C_9 straight or branched chain alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, aryl, heteroaryl, carbocycle, or heterocycle, wherein said alkyl, alkenyl, alkynyl,

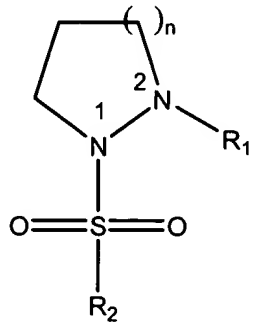
aryl, heteroaryl, carbocycle, or heterocycle is unsubstituted or substituted with one or more substituents selected from R_3;

R_3 is selected from the group consisting of hydrogen, C_1-C_9 alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, C_1-C_9 alkoxy, C_2-C_9 alkenyloxy, aryloxy, phenoxy, benzyloxy, hydroxy, carboxy, C_1-C_9 thioalkyl, C_2-C_9 thioalkenyl, C_1-C_9 alkylamino, C_2-C_9 alkenylamino, cyano, nitro, imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocycle, and heterocycle,

wherein said alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, aryloxy, thioalkyl, thioalkenyl, alkylamino, alkenylamino, aryl, heteroaryl, carbocycle, or heterocycle group is optionally substituted with a hydroxy, carboxy, carbonyl, cyano, nitro, imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocyle, or heterocycle group; and

X is O or S.

45. (New) A method of making a pharmaceutical composition, comprising adding together a pharmaceutically acceptable carrier and a compound of formula II:

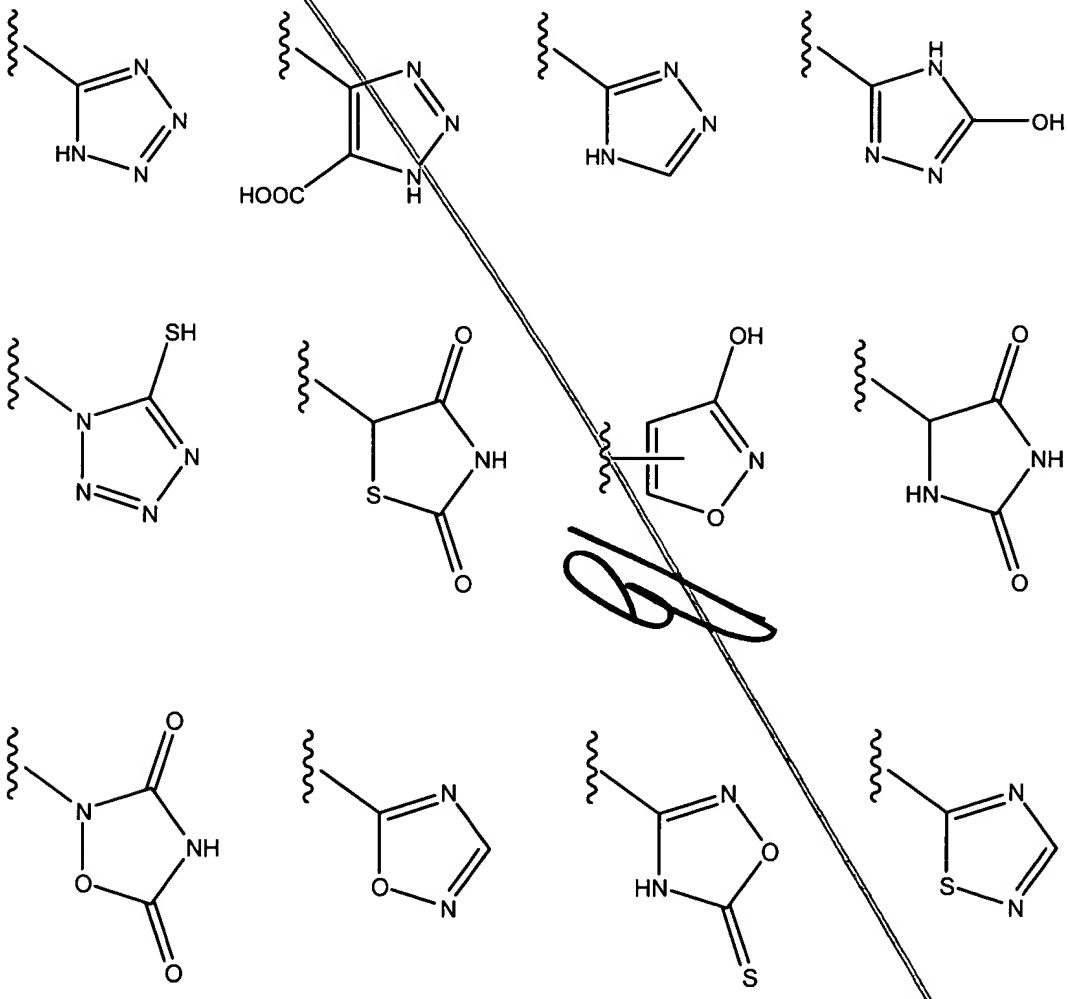


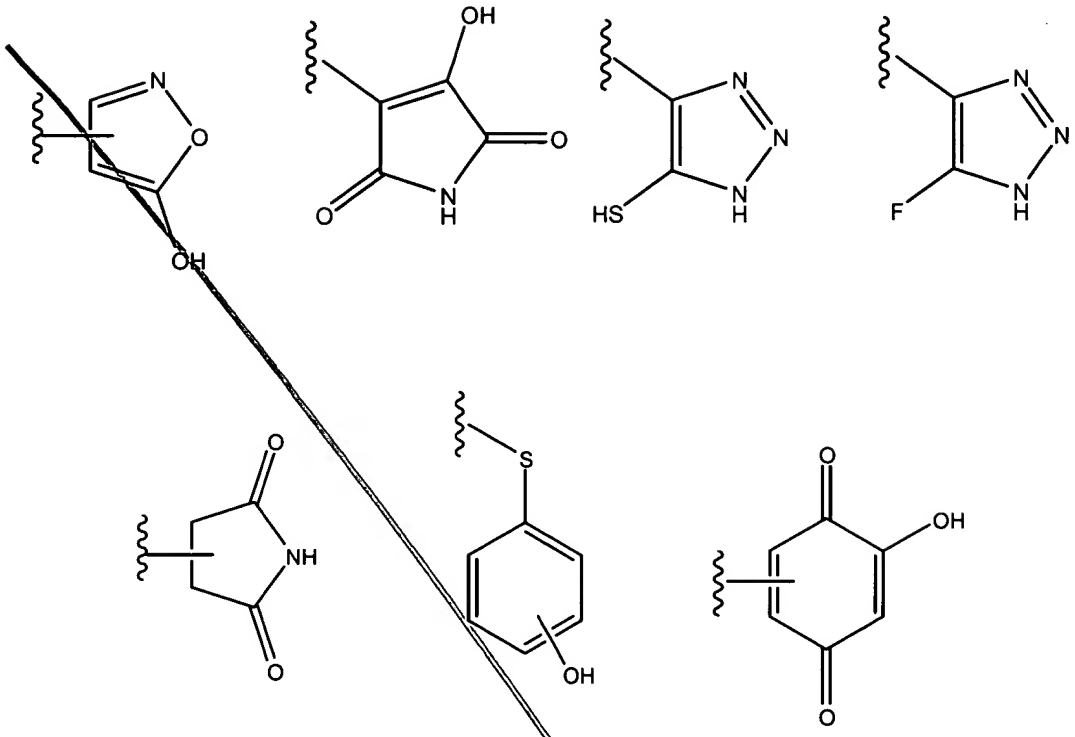
II

or a pharmaceutically acceptable salt, ester or solvate thereof, wherein:

n = 1-3;

R_1 is selected from the group consisting of $-CR_3$, $-COOR_3$, $-COR_3$, -COOH, $-SO_3H$, $-SO_2HNR_3$, $-PO_2(R_3)_2$, -CN, $-PO_3(R_3)_2$, $-OR_3$, $-SR_3$, $-NHCOR_3$, $-N(R_3)_2$, $-CON(R_3)_2$, $-CONH(O)R_3$, $-CONHNHSO_2R_3$, $-CONHNSO_2R_3$, $-CONR_3CN$,





wherein said R_1 group is either unsubstituted or additionally substituted with R_3;

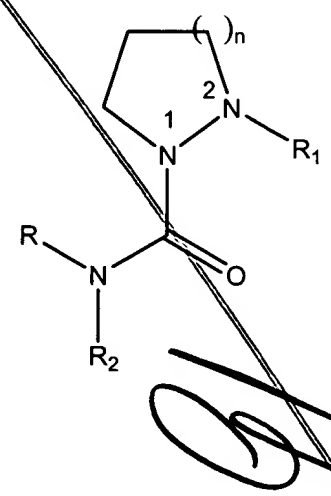
R_2 is selected from the group consisting of hydrogen, C_1-C_9 straight or branched chain alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, aryl, heteroaryl, carbocycle, or heterocycle, wherein said alkyl, alkenyl, alkynyl, aryl, heteroaryl, carbocycle, or heterocycle is unsubstituted or substituted with one or more substituents selected from R_3;

R_3 is selected from the group consisting of hydrogen, C_1-C_9 alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, C_1-C_9 alkoxy, C_2-C_9 alkenyloxy, aryloxy, phenoxy, benzyloxy, hydroxy, C_1-C_9 thioalkyl, C_2-C_9 thioalkenyl, C_1-C_9 alkylamino, C_2-C_9 alkenylamino, cyano, nitro, imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocycle, and heterocycle,

wherein said alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, aryloxy, thioalkyl, thioalkenyl, alkylamino, alkenylamino, aryl, heteroaryl, carbocycle, or heterocycle group is optionally substituted with a hydroxy, carboxy, carbonyl, cyano, nitro, imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocyle, or heterocycle group.

46. (New) A method of making a pharmaceutical composition, comprising adding together a pharmaceutically acceptable carrier and a compound of formula III:

A6



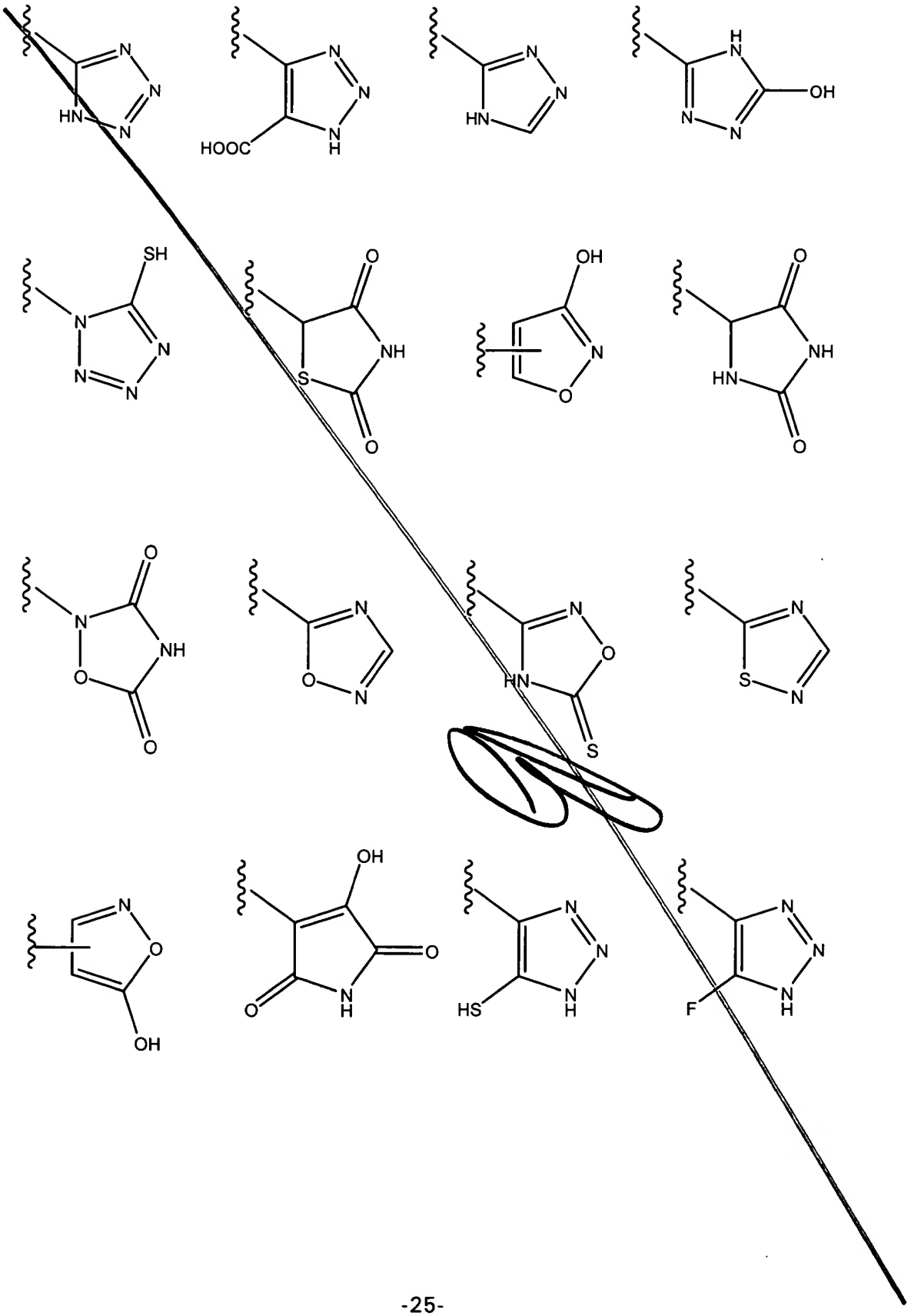
III

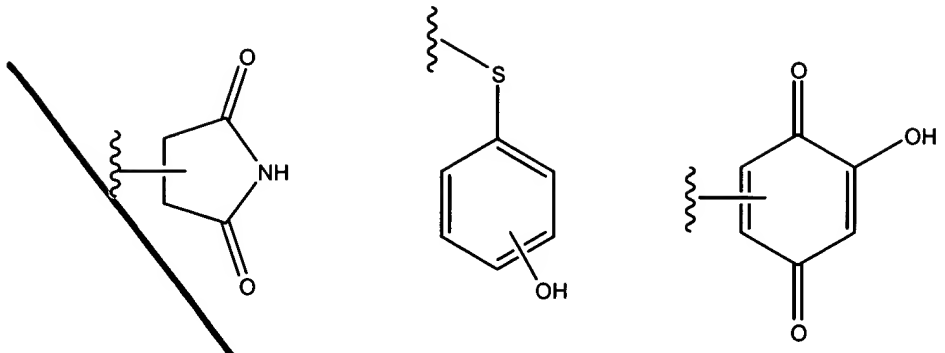
or a pharmaceutically acceptable salt, ester or solvate thereof, wherein:

n = 1-3;

R_1 is selected from the group consisting of $-CR_3$, $-COOR_3$, $-COR_3$, $-COOH$, $-SO_3H$, $-SO_2HNR_3$, $-PO_2(R_3)_2$, $-CN$, $-PO_3(R_3)_2$, $-OR_3$, $-SR_3$, $-NHCOR_3$, $-N(R_3)_2$, $-CON(R_3)_2$, $-CONH(O)R_3$, $-CONHNHSO_2R_3$, $-COHNSO_2R_3$, $-CONR_3CN$,

A6





wherein said R_1 group is either unsubstituted or additionally substituted with R_3;

A6

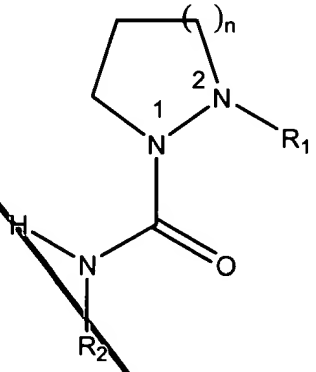
R_2 is selected from the group consisting of hydrogen, C_1-C_9 straight or branched chain alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, aryl, heteroaryl, carbocycle, or heterocycle, wherein said alkyl, alkenyl, alkynyl, aryl, heteroaryl, carbocycle, or heterocycle is unsubstituted or substituted with one or more substituents selected from R_3;

R_3 is selected from the group consisting of hydrogen, C_1-C_9 alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, C_1-C_9 alkoxy, C_2-C_9 alkenyloxy, aryloxy, phenoxy, benzyloxy, hydroxy, carboxy, C_1-C_9 thioalkyl, C_2-C_9 thioalkenyl, C_1-C_9 alkylamino, C_2-C_9 alkenylamino, cyano, nitro, imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocycle, and heterocycle,

wherein said alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, aryloxy, thioalkyl, thioalkenyl, alkylamino, alkenylamino, aryl, heteroaryl, carbocycle, or heterocycle group is optionally substituted with a hydroxy, carboxy, carbonyl, cyano, nitro, imino, sulfonyl,

thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocyle, or heterocycle group.

47. (New) A method of making a pharmaceutical composition, comprising adding together a pharmaceutical carrier and a compound of formula IV:

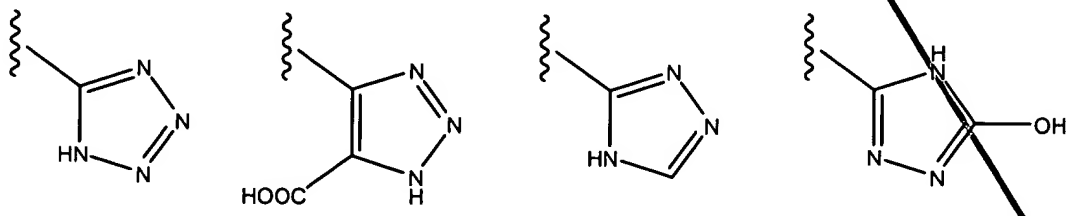


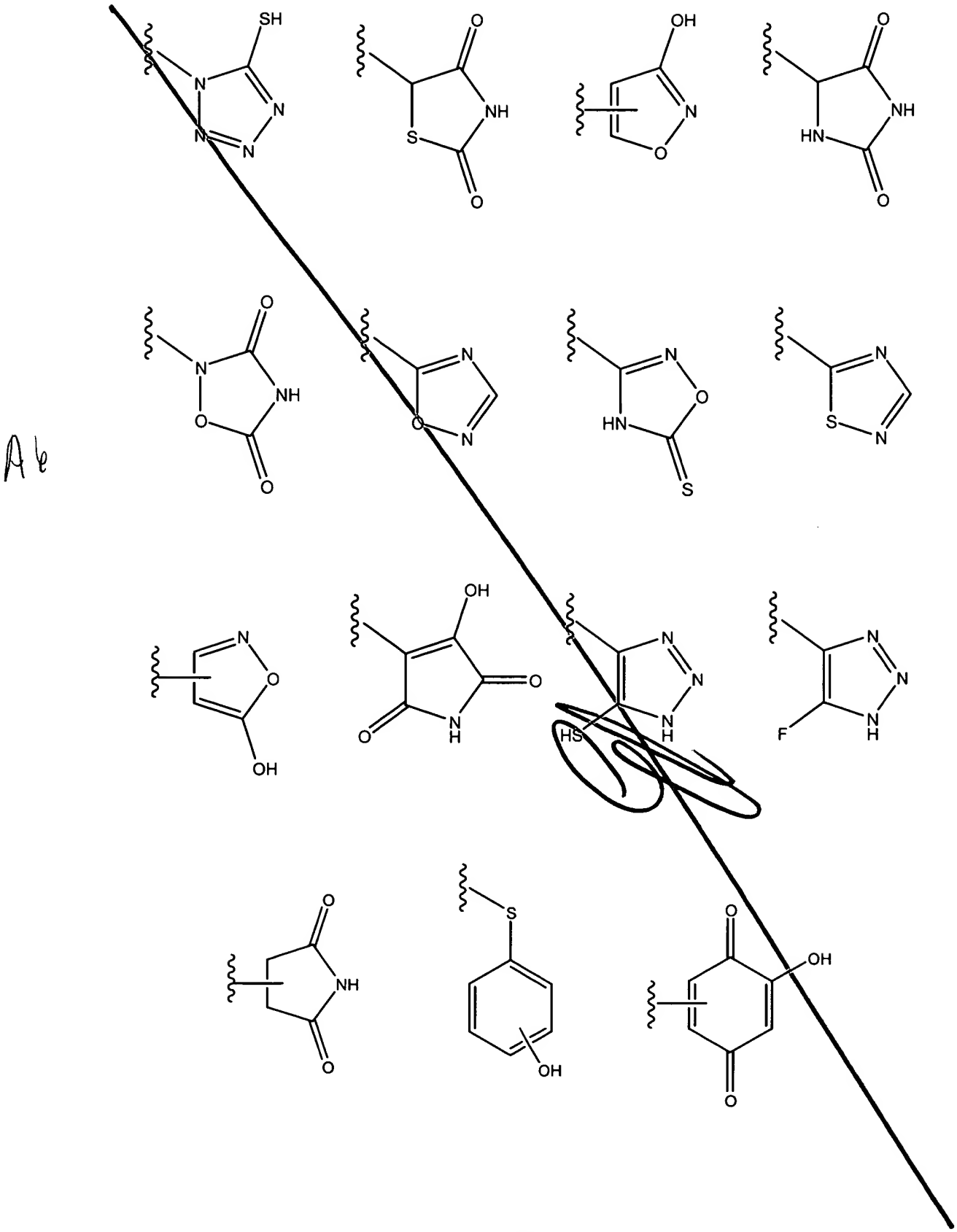
IV

or a pharmaceutically acceptable salt, ester or solvate thereof, wherein:

n = 1-3;

R_1 is selected from the group consisting of -CR_3, -$COOR_3$, -COR_3, -COOH, -SO_3H, -SO_2HNR_3, -$PO_2(R_3)_2$, -CN, -$PO_3(R_3)_2$, -OR_3, -SR_3, -$NHCOR_3$, -$N(R_3)_2$, -$CON(R_3)_2$, -$CONH(O)R_3$, -$CONHNHSO_2R_3$, -$COHNSO_2R_3$, -$CONR_3CN$,





wherein said R_1 group is either unsubstituted or additionally substituted with R_3;

R_2 is selected from the group consisting of hydrogen, C_1-C_9 straight or branched chain alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, aryl, heteroaryl, carbocycle, or heterocycle, wherein said alkyl, alkenyl, alkynyl, aryl, heteroaryl, carbocycle, or heterocycle is unsubstituted or substituted with one or more substituents selected from R_3;

R_3 is selected from the group consisting of hydrogen, C_1-C_9 alkyl, C_2-C_9 straight or branched chain alkenyl, C_2-C_9 straight or branched chain alkynyl, C_1-C_9 alkoxy, C_2-C_9 alkenyloxy, aryloxy, phenoxy, benzyloxy, hydroxy, carboxy, C_1-C_9 thioalkyl, C_2-C_9 thioalkenyl, C_1-C_9 alkylamino, C_2-C_9 alkenylamino, cyano, nitro, imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocycle, and heterocycle,

wherein said alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, aryloxy, thioalkyl, thioalkenyl, alkylamino, alkenylamino, aryl, heteroaryl, carbocycle, or heterocycle group is optionally substituted with a hydroxy, carboxy, carbonyl, cyano, nitro, imino, sulfonyl, thiocarbonyl, sulfhydryl, halo, haloalkyl, trifluoromethyl, aryl, heteroaryl, carbocyle, or heterocycle group.